

IN THE CLAIMS:

1. (Currently Amended) A ball and socket joint for a motor vehicle, the ball and socket joint comprising:

a housing having a recess;

a ball pivot which has a pin and a joint ball, which is mounted with said joint ball rotatably and pivotably in said recess of said housing, whereby said pin extends out through an opening provided in said housing;

a sealing bellows arranged between said housing and said pin; and

a multipart measuring array, which has at least one signal transmitter and at least one sensor, said measuring array being arranged between a pin-side end of said joint ball and a pin-side end of said sealing bellows, said signal transmitter comprising a magnet and said sensor comprising a magnetic-field-sensitive sensor.

2. (Previously Presented) A ball and socket joint in accordance with claim 1, wherein part of said measuring array is arranged at said pin and another part of said measuring array is arranged at said housing.

3. (Previously Presented) A ball and socket joint in accordance with claim 1, wherein a part of said measuring array is arranged at an edge area of said housing which surrounds said opening.

4. (Previously Presented) A ball and socket joint in accordance with claim 1, wherein said signal transmitter produces a dipole field.

5. (Canceled)

6. (Currently Amended) A ball and socket joint in accordance with claim ~~[[5]]~~ 1, wherein said signal transmitter comprises one of a permanent magnet and an electromagnet.

7. (Previously Presented) A ball and socket joint in accordance with claim 1, wherein said measuring array has a plurality of said signal transmitters and a plurality of said sensors.

8. (Previously Presented) A ball and socket joint in accordance with claim 1, wherein said measuring array has two said signal transmitters and three said sensors.

9. (Previously Presented) A ball and socket joint in accordance with claim 8, wherein the two said signal transmitters are arranged diametrically opposite one another at said pin and said sensors, forming the corner points of a triangle, are arranged at said edge area of said housing which surrounds said opening.

10. (Currently Amended) A motor vehicle ball and socket joint comprising:  
a housing having an opening to a recess;

a ball pivot with a pin and a joint ball mounted in said recess of said housing whereby said pin extends out through said opening;

5 a sealing bellows connected to said housing and said pin; and

a multipart measuring array including signal transmitters mounted to one of said pin adjacent to said joint ball and said housing, adjacent to said sealing bellows, and sensors mounted to one of said pin, adjacent to said joint ball and said housing, adjacent to said sealing bellows, wherein said signal transmitters each comprise a magnet and said sensors each  
10 comprise a magnetic-field-sensitive sensor.

11. (Previously Presented) A motor vehicle ball and socket joint in accordance with claim 10, wherein said sensors are mounted at an edge area of said housing which surrounds said opening.

12. (Previously Presented) A motor vehicle ball and socket joint in accordance with claim 10, wherein said signal transmitters produce a dipole field.

13. (Canceled)

14. (Previously Presented) A motor vehicle ball and socket joint in accordance with claim 10, wherein each of said signal transmitters comprises one of a permanent magnet and an electromagnet.

15. (Previously Presented) A motor vehicle ball and socket joint in accordance with claim 10, wherein said signal transmitters comprise two signal transmitters and said sensors comprise three sensors.

16. (Previously Presented) A motor vehicle ball and socket joint in accordance with claim 15, wherein said signal transmitters are arranged diametrically opposite one another at said pin and said sensors are arranged forming corner points of a triangle at an edge area of said housing which surrounds said opening.

17. (New) A ball and socket joint for a motor vehicle, the ball and socket joint comprising:

a housing having a recess;

a ball pivot which has a pin and a joint ball, which is mounted with said joint ball rotatably and pivotably in said recess of said housing, whereby said pin extends out through an opening provided in said housing;

a sealing bellows arranged between said housing and said pin; and

a multipart measuring array, which has at least one signal transmitter and at least one sensor, said measuring array being arranged between a pin-side end of said joint ball and a pin-side end of said sealing bellows, said signal transmitter producing a dipole field.

18. (New) A ball and socket joint for a motor vehicle, the ball and socket joint

comprising:

a housing having a recess;

5 a ball pivot which has a pin and a joint ball, which is mounted with said joint ball rotatably and pivotably in said recess of said housing, whereby said pin extends out through an opening provided in said housing;

a sealing bellows arranged between said housing and said pin; and

10 a multipart measuring array having a plurality of signal transmitters and a plurality of sensors, said measuring array being arranged between a pin-side end of said joint ball and a pin-side end of said sealing bellows.

19. (New) A ball and socket joint for a motor vehicle, the ball and socket joint comprising:

a housing having a recess;

5 a ball pivot which has a pin and a joint ball, which is mounted with said joint ball rotatably and pivotably in said recess of said housing, whereby said pin extends out through an opening provided in said housing;

a sealing bellows arranged between said housing and said pin; and

10 a multipart measuring array, said measuring array having two signal transmitters and three sensors, said measuring array being arranged between a pin-side end of said joint ball and a pin-side end of said sealing bellows.

20. (New) A ball and socket joint for a motor vehicle, the ball and socket joint comprising:

a housing having a recess;

a ball pivot which has a pin and a joint ball, which is mounted with said joint ball rotatably and pivotably in said recess of said housing, whereby said pin extends out through an opening provided in said housing;

a sealing bellows arranged between said housing and said pin; and

a multipart measuring array, said measuring array having two signal transmitters and three sensors, said measuring array being arranged between a pin-side end of said joint ball and a pin-side end of said sealing bellows, wherein the two said signal transmitters are arranged diametrically opposite one another at said pin and said sensors, forming the corner points of a triangle, are arranged at said edge area of said housing which surrounds said opening.

21. (New) A motor vehicle ball and socket joint comprising:

a housing having an opening to a recess;

a ball pivot with a pin and a joint ball mounted in said recess of said housing whereby said pin extends out through said opening;

a sealing bellows connected to said housing and said pin; and

a multipart measuring array including signal transmitters mounted to one of said pin adjacent to said joint ball and said housing, adjacent to said sealing bellows, and sensors mounted to one of said pin, adjacent to said joint ball and said housing, adjacent to said sealing

bellows, said signal transmitters producing a dipole field.

22. (New) A motor vehicle ball and socket joint comprising:

a housing having an opening to a recess;

a ball pivot with a pin and a joint ball mounted in said recess of said housing whereby  
said pin extends out through said opening;

5 a sealing bellows connected to said housing and said pin; and

a multipart measuring array including signal transmitters mounted to one of said pin  
adjacent to said joint ball and said housing, adjacent to said sealing bellows, and sensors  
mounted to one of said pin, adjacent to said joint ball and said housing, adjacent to said sealing  
bellows, each of said signal transmitters comprising one of a permanent magnet and an  
10 electromagnet.

23. (New) A motor vehicle ball and socket joint comprising:

a housing having an opening to a recess;

a ball pivot with a pin and a joint ball mounted in said recess of said housing whereby  
said pin extends out through said opening;

5 a sealing bellows connected to said housing and said pin; and

a multipart measuring array including signal transmitters mounted to one of said pin  
adjacent to said joint ball and said housing, adjacent to said sealing bellows, and sensors  
mounted to one of said pin, adjacent to said joint ball and said housing, adjacent to said sealing

bellows, said signal transmitters comprising two signal transmitters and said sensors comprising  
10 three sensors.

24. (New) A motor vehicle ball and socket joint comprising:

a housing having an opening to a recess;

a ball pivot with a pin and a joint ball mounted in said recess of said housing whereby  
said pin extends out through said opening;

5 a sealing bellows connected to said housing and said pin; and

a multipart measuring array including signal transmitters mounted to one of said pin  
adjacent to said joint ball and said housing, adjacent to said sealing bellows, and sensors  
mounted to one of said pin, adjacent to said joint ball and said housing, adjacent to said sealing  
bellows, said signal transmitters comprising two signal transmitters and said sensors comprising  
10 three sensors, wherein said signal transmitters are arranged diametrically opposite one another  
at said pin and said sensors are arranged forming corner points of a triangle at an edge area of  
said housing which surrounds said opening.